

rendering means for rendering the virtual world from the ~~groups~~

8. (Amended) A computerized apparatus comprising:  
a first computer including a first database; and  
a second computer, connected to the first computer,  
including:  
an editing means for editing the first database and  
storing [the] results thereof in grouping files;  
a conversion means for converting a format of the  
grouping files; and  
means for building a script file for making [a] at least  
one of a wireframe and polygon-based virtual world using  
the grouping files which have the format thereof  
converted by the conversion means.--

Please cancel without prejudice Claim 10.

#### REMARKS

Favorable reconsideration of the present application in light of the following discussion and in view of the present amendment is respectfully requested.

Claims 1-9 are currently pending in the present application, Claims 1, 7 and 8 having been amended and Claim 10 having been cancelled herewith.

New Figures 2, 3A and 3B are submitted herewith which are believed to provide a better understanding of the present invention and highlight some of the patentably distinguishing

characteristics of the present invention. These drawings originally appeared in Appendix 2, on pages 19 and 8, respectively, and therefore introduce no new matter. Submitted herewith is a further letter requesting approval by the Official Draftsperson for the drawing additions. Upon receiving approval for the requested drawing additions, and upon receiving a formal Notice of Allowance, prior to payment of the base issue fee, formal drawings, including the requested drawing additions, will be filed.

In the outstanding Official Action, the title of the invention was objected to as not descriptive. Furthermore, Claims 1-7 were rejected under 35 U.S.C. §102(e) as being anticipated by, or in the alternative, under 35 U.S.C. §103 as being obvious over, Wexelblat et al (hereinafter Wexelblat). Claims 8-10 were rejected under 35 U.S.C. §103 as being unpatentable over Wexelblat in view of Richburg, and Claim 10 was further rejected under 35 U.S.C. §112, first and second paragraphs.

In response to the objection to the title, an amended title is provided herewith which is more descriptive. No further objection on that basis is anticipated.

In response to the rejection of Claims 1 and 7 under 35 U.S.C. §102(e) as being anticipated by Wexelblat, or in the alternative, under 35 U.S.C. §103 as being obvious over Wexelblat, Applicants respectfully traverse the rejection in light of amended Claims 1 and 7. As clearly shown throughout

the specification, Wexelblat is directed to a "human interface with information systems, and, more particularly, to a computer system for inspecting and modifying data contained within an information system" (column 1, lines 9-12, emphasis added). Furthermore, the invention of Wexelblat is directed towards using a "'cyberspace' ...[which is] a large pool of complex information organized along virtually every conceptual line that can be thought of" (column 1, lines 21-23). The information in the cyberspace is depicted as shown in Figure 2 to enable a user to conceptualize the data spatially; however, this is only a perceptual structuring and does not correspond to structuring of an object in a virtual world (i.e., a fixture in a kitchen), as in the present invention. In fact, the "plurality of views 12-18 of the base... which are used to create the artificial reality so that many different individuals can use it" are not views in a visual sense, but rather in a database sense. As defined in IBM Dictionary of Computing, McGraw-Hill, 1994, pg. 732, (enclosed herewith as Appendix 1), a view in an SQL database is "an alternative representation of data from one or more tables. A view can include all or some of the columns contained in the table or tables on which it is defined." Thus when an architect "sees" one view and a customer "sees" another view, they are really given access to different pieces of information in the same database.

Also, the information received and grouped in Wexelblat is different than the information received and grouped in the present invention. In Wexelblat, to determine if information in one part of the databases/cyberspace matches information in which a user is interested, mathematical relations are established between information and changes in icon representations. "With the processor 51, the user accesses and examines discrete segments of data within the memory 52 - either automatically or under manual control via the input 55. As the region of access of the processor 51 is moved, the mathematical relationships of the automatic icon system are brought into contact with a sequence of different discrete segments of data that are stored in memory 52. This contact causes the processor 51, the display interface 53, and the monitor to automatically generate an icon 56 with features 57-60, whose changing appearance indicates the relationship between the parameters of interest to the user and the particular segments of information within the memory 52 to which the mathematical relationships have access" (column 14, lines 36-49, emphasis added). Thus, the only things received in Wexelblat are markers/nodes which represent information sources and changing icons which represent correlation between the information sources and information desired by a user. This differs greatly from "a pictorial representation of objects in the virtual world" which are grouped into "at least one of wireframe objects and polygon objects" as claimed in

the present claims and is therefore neither anticipated by nor rendered obvious by Wexelblat.

Furthermore, with reference to rejection of Claim 2, the attribute assigning means of the present invention assigns attributes to the output of the grouping means, which are "wireframe objects and polygon objects". Therefore, the assigning means of the present invention is patentably distinguishing from the attribute assigning means of Wexelblat. The attribute assigning means assigns attributes to the "at least one of wireframe objects and polygon objects" to enable the objects to be rendered more realistically in a virtual world of objects (i.e., in a virtual kitchen). The appearance of the attributes assigned to the icons of Wexelblat are defined by the correlation of data in a segment of the cyberspace with information pertinent to the user. As the user chooses to examine different parts of the cyberspace, "[t]his ... causes the processor 51, the display interface 53, and the monitor to automatically generate an icon 56 with features 57-60, whose changing appearance indicates the relationship between the parameters of interest to the user and the particular segments of information within the memory 52 to which the mathematical relationships have access" (column 14, lines 43-49). Thus, the attribute assignment means which assigns attributes to "wireframe objects and polygon objects" in a virtual world to enhance visual realism is neither anticipated by nor rendered obvious by Wexelblat.

In response to the rejection of Claim 3, Applicants respectfully traverse the rejection. Wexelblat discloses, in columns 8 and 9, a system by which an icon is moved through a cyberspace and wherein an icon is changed in relation to the information stored in different parts of the database, where the different parts of the database are represented by spatially separated areas in an artificial world. However, when attempting to convey the meaning of information in the cyberspace through the appearance of icons, Wexelblat discloses using "shape, size, position, texture, annotation, animation, etc.", but Wexelblat does not disclose assigning constraints of motion attributes. Wexelblat fails to teach such a limitation because the system of Wexelblat is designed to provide an artificial layout to data and to show the correlation of one set of data with a desired set or attributes of data. Data does not have constraints of motion like the "wireframe objects and polygon objects" of the present system because data is abstract, unlike the "pictorial representation[s] of objects of the virtual world" which, by their physical properties, have constraints of motion.

In response to the rejections of Claims 4-6, Claims 4-6 depend from Claim 1 and are believed to be patentable for at least the reasons set forth for the patentability of Claim 1.

In response to the rejection of Claims 8-10 under 35 U.S.C. §103 as being unpatentable over Wexelblat in view of Richburg, Applicants respectfully traverse the rejection in

light of amended Claim 8. As was argued for independent Claims 1 and 7, Wexelblat is directed towards the editing of information contained within a cyberspace, as opposed to virtual worlds drawn using wireframe objects and polygon objects, such as might be found in the real world in a kitchen. In addition, although Richburg discloses generating scripts, these scripts are used to generate code to solve specific problems using modified general solutions stored in a database. The scripts of Richburg are not used to build virtual worlds. Therefore, the combination of Wexelblat, which does not disclose a virtual world within the meaning of the present invention, with Richburg, which uses modifiable scripts to solve specific problems using general purpose solutions, is not motivated since Wexelblat teaches an interactive method to search a database and Richburg teaches a way to create an automated problem solver. Thus, the combination of the cited references would imply an automatic database analyzer which would be contrary to the stated purpose of Wexelblat of enabling "people to navigate through the information space focusing on specific information without losing their awareness of information at the global level" (column 1, lines 33-35). Furthermore, even if the cited references were combined, the resulting system would be a system which uses scripts to determine the relationship between information in a cyberspace and desired information, which does not render obvious "means for building a script

file for making at least one of a wireframe and polygon-based virtual world".

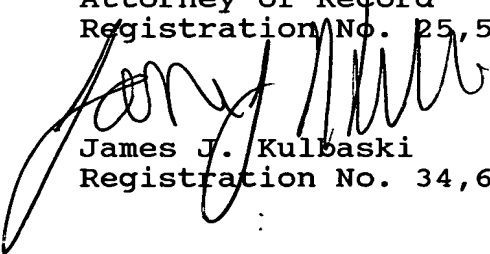
In response to the rejection of Claim 10 under 35 U.S.C. §112, first and second paragraphs, the rejection of Claim 10 is rendered moot by the cancellation of Claim 10.

Consequently, in light of the present amendment and in view of the above discussion, the pending claims are believed to be patentably distinguishing over the prior art of record. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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